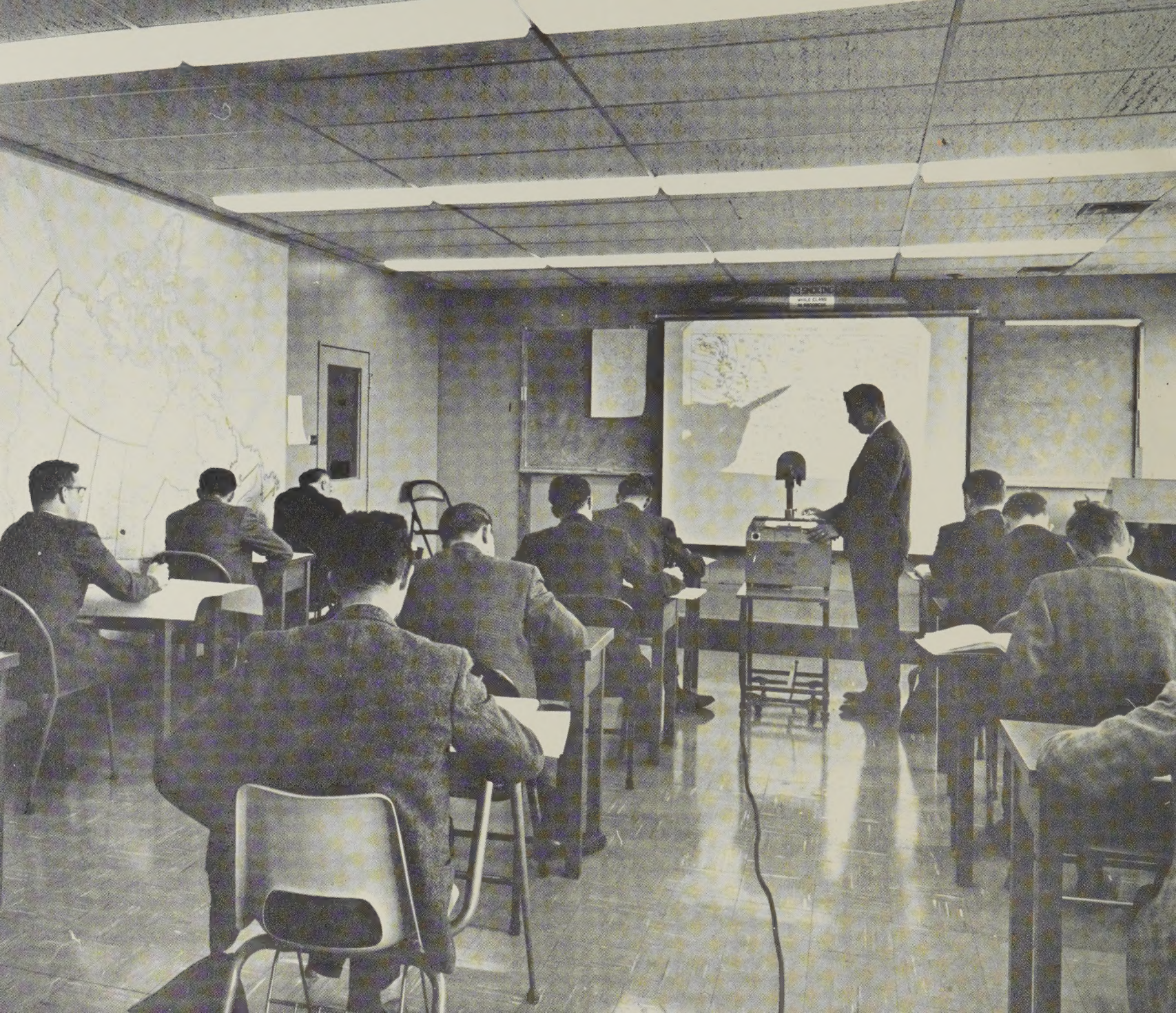
airport campus

The Department of Transport's School for Aviation Specialists


NO SMOKING
WHILE CLASS

Meteorology

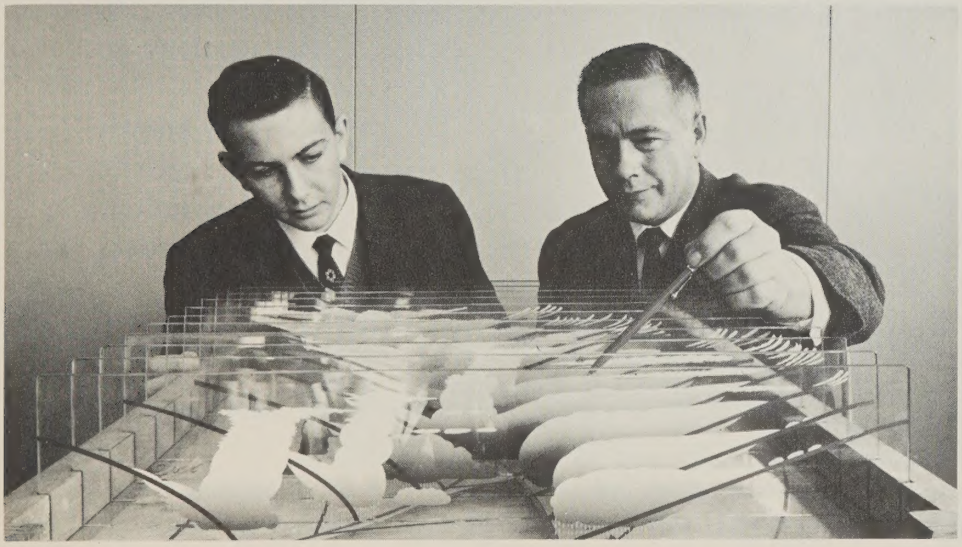
To train meteorological technicians capable of taking weather observations needed in the preparation of forecasts, the school presents a three-month basic weather course. High school graduates are hired as either surface observers or radiosonde observers. The latter are sent on to a 16-week upper atmosphere course at Scarborough, Ontario, after completion of the course in Ottawa.

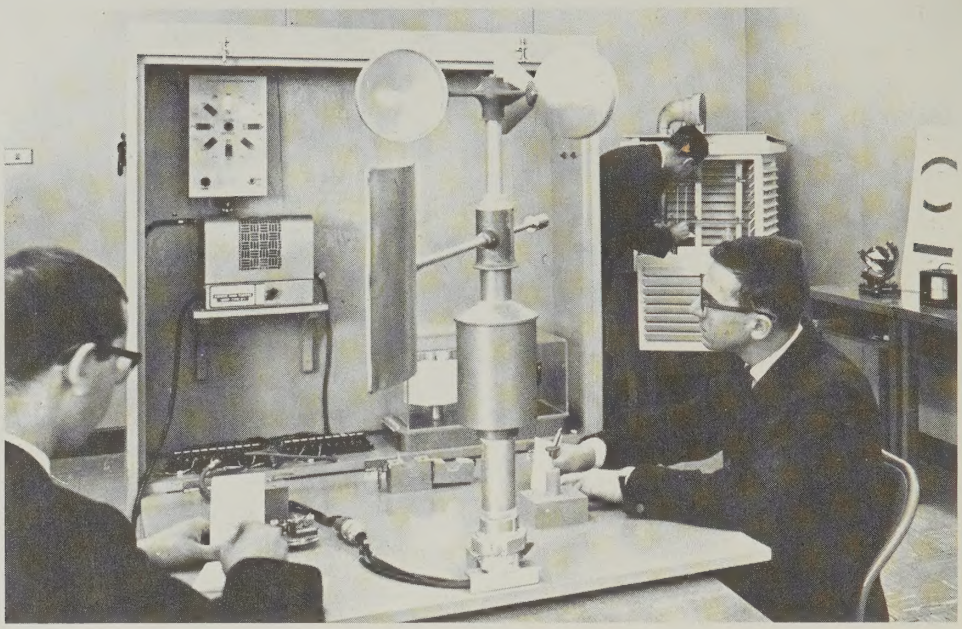
The meteorological technicians are also trained as weather map plotters. These men, besides taking observations, put the resulting data on the special maps used by forecasters.

The technicians are also taught teletype operations and D.O.T. procedures in that field, for use in the nation-wide meteorological teletype network.

Meteorological technician at Eureka, N.W.T. weather station releases rawinsonde balloon with radio to measure winds aloft.

Instructor points out cloud formations on training model.





Array of meteorological observing instruments aids students.

Advanced Meteorology Courses

In addition to the basic course for newly-recruited trainees, the ASTS presents a number of advanced courses in meteorology to practising meteorological technicians.

Each of these courses is designed to increase the employee's knowledge in meteorology and to prepare him to perform the specific duties of higher positions. One course, of sixteen weeks' duration, teaches technicians how to provide weather information to pilots and others.

Another course trains them to provide support to the forecaster in the preparation of weather maps and charts.

Still another course trains them on the operation of radar used in the observation of weather.

Six other courses are presented and more are in the planning stage. One of the new courses will be for employees selected to work on research programs in meteorology.

Student weather observers take readings on roof of terminal at Ottawa International Airport.

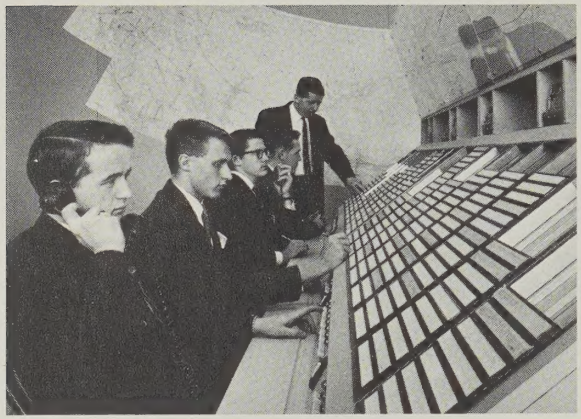
Air Traffic Control

The courses given at the school fall into three main groups: Air Traffic Control, Meteorology, Telecommunications and Electronics. One of the longest courses is for air traffic controllers.

High school graduates are recruited across Canada for the air traffic control course. Lasting 20 weeks, it covers air regulations, meteorology, radio aids to air navigation, aircraft performance, air navigation, and air traffic control procedures.

About half the time is spent in the classroom while the rest of the course is devoted to practice under simulated conditions. These

Student air traffic controllers in one of the simulated operations room in the Air Services Training School, Ottawa.



Student air traffic controllers in a simulated A. T. C. Centre.

simulated exercises are done with two electronic training devices that let the student practice the control of air traffic under conditions that are almost a perfect duplicate of the real job ahead.

After his graduation the student is assigned to a control tower for three months of practical training before receiving his air traffic controller's license.

Two more courses for air traffic controllers are available at the Air Services School. One is a two-week radar course for qualified area controllers who have no radar experience, the other is a three-week advanced technical course for supervisors.

Would-be air traffic controllers, assuming role of aircraft captains, manipulate projectors (centre of table) that throw dots of light on ceiling screen. Dots represent "aircraft" they "pilot" according to instructions given them through head phones by other students in adjoining room, who play part of controllers and watch same ceiling picture on closed-circuit TV.

Classroom lectures at the school are illustrated by slides and other training aids.

Airport Campus

Time was when a career in aviation meant you were either a pilot or a mechanic.

To keep the planes in the air today it takes air traffic controllers, radar operators, meteorological observers, radio operators, plus a multitude of highly qualified technicians to look after the incredible array of electronic equipment.

The Department of Transport, responsible for providing all these services, employs thousands of men and women who possess the special skills and know-how needed in these jobs.

Where does it get such personnel? High schools provide the basis for many of these jobs but they don't offer the sharply focused training necessary. Vocational schools teach many useful and even indispensable skills but they don't turn out the specialists needed.

That is why, in 1959, the department established its central Air Services Training School (ASTS) at Ottawa International Airport — a consolidation of several smaller government courses previously run in scattered parts of the country.

Here, in classrooms and workshops, through lectures and practice under carefully simulated "on the job" conditions, the department trains the elite corps of men and women who carry out that vital utility known as air services.

Most of the school's students are young people about to embark on a career in aviation. Many, too, are experienced D.O.T. employees who are getting more advanced knowledge to keep up with the new and increasingly complex types of equipment continually being installed.

This combination of courses for beginners and brush-up programs for "old hands" makes for the fascinating curriculum at the D.O.T. school.

Three Locations

The ASTS occupies three locations. The classrooms and the electronic trainer for aspiring air traffic controllers as well as all meteorological training laboratories, are situated in the department's air terminal at Ottawa International Airport.

Maintenance of equipment is taught in the airport's former terminal, where there is plenty of room to dismantle, and put together again, a bewildering array of electronic devices.

The third site is at Carp, Ontario, near Ottawa, where seven buildings at the D.O.T.-owned airport are set aside for practical training on radio aids to air navigation. This equipment would interfere with aviation if it were installed at busy Ottawa International Airport.

The buildings at Carp are typical of those at real operational sites and provide students with conditions almost identical to the ones they may expect after being assigned to departmental duty.

The centralization of all training at one school has several advantages. It eliminates expensive duplication of equipment and staffs, makes for uniformity of training standards, permits instructors to explain and implement policy directives issued from Ottawa headquarters, and allows for short-time changes in the curriculum to meet any immediate needs.

The Future

Department of Transport officials see a bright future for the Air Services Training School. It produced its first graduates in 1960 and is considered still in its infancy.

The curriculum can and probably will be increased by many specialized courses dictated by automation, supersonic aviation, and space age communications.

Apart from the advanced operational and technical courses that will undoubtedly be needed, the school may well be called upon to branch out into the fields of administration and supervisory training, and into languages.

How to Apply

What does all this mean to the high school student?

Each year the Department of Transport enrolls hundreds of high school graduates at the Air Services Training School for a planned career in telecommunications, meteorology, or air traffic control.

Like all would-be public servants they are selected after formally applying to the Civil Service Commission.

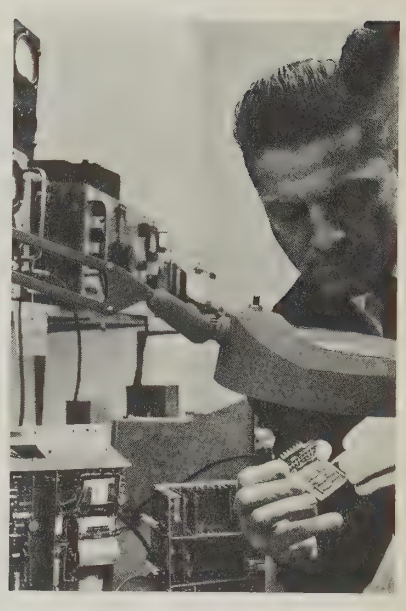
Competitions from which selections are made for basic courses at the school are announced periodically by the Commission in newspaper advertisements and posters in public places such as post offices.

If you are interested in an air services career, watch carefully for these Civil Service Commission ads and posters.

The school also trains monitoring operators whose job it is to police the radio spectrum to ensure that all users remain on their assigned frequencies and conduct communications in accordance with international regulations.

A radio operator student practicing Morse code, which is copied directly on the typewriter.

Using illuminated magnifying glass, instructor points out details of miniaturized electronic equipment for the benefit of a student.



Huge diagrams cover walls in classroom in former air terminal at Ottawa International Airport now used for electronic technician training.

Student communicators practise on different kinds of teletype equipment.

A class of student radio operators at work.

Telecommunications

In the fast-growing field of telecommunications and electronics, the ASTS trains D.O.T. employees from three main occupational groups: radio operators, electronic technicians, and radio regulations personnel. More than 20 different courses have already been presented in these three areas of telecommunications, and a dozen or so more are in the offing.

In the first category is an eight-month course for radio operators.

Students learn Department of Transport procedures, both in air services and marine services, and the use of departmental equipment peculiar to both. They also take special training to increase their typing and Morse code speeds, and learn the intricacies of teletype circuits and international communications procedures.

A month and a half of the course is set aside for training in the taking of meteorological observations, a task that is done by operators in some of the department's aeradio stations.

After graduation, radio operators and radio technicians may be posted to radio communications centre like this one at Montreal International Airport.

Radio Technicians

Radio technicians are given courses in the use of aviation and weather radar as well as marine radar such as used aboard ships of the department's Canadian Coast Guard fleet.

There are also courses, varying in length from one week to two months, on other radio aids to air navigation, such as the Very High Frequency Omni-range, Instrument Landing System, airborne radio equipment, and other related electronic aids.

They are also trained in the operation and maintenance of automatic error-correcting and channelizing equipment used in keeping departmental communications systems at top efficiency. In many instances, such equipment is peculiar to the department's operations and not used in ordinary fields of radio and electronics operations, hence the necessity of giving operators special instruction in its make-up and use.

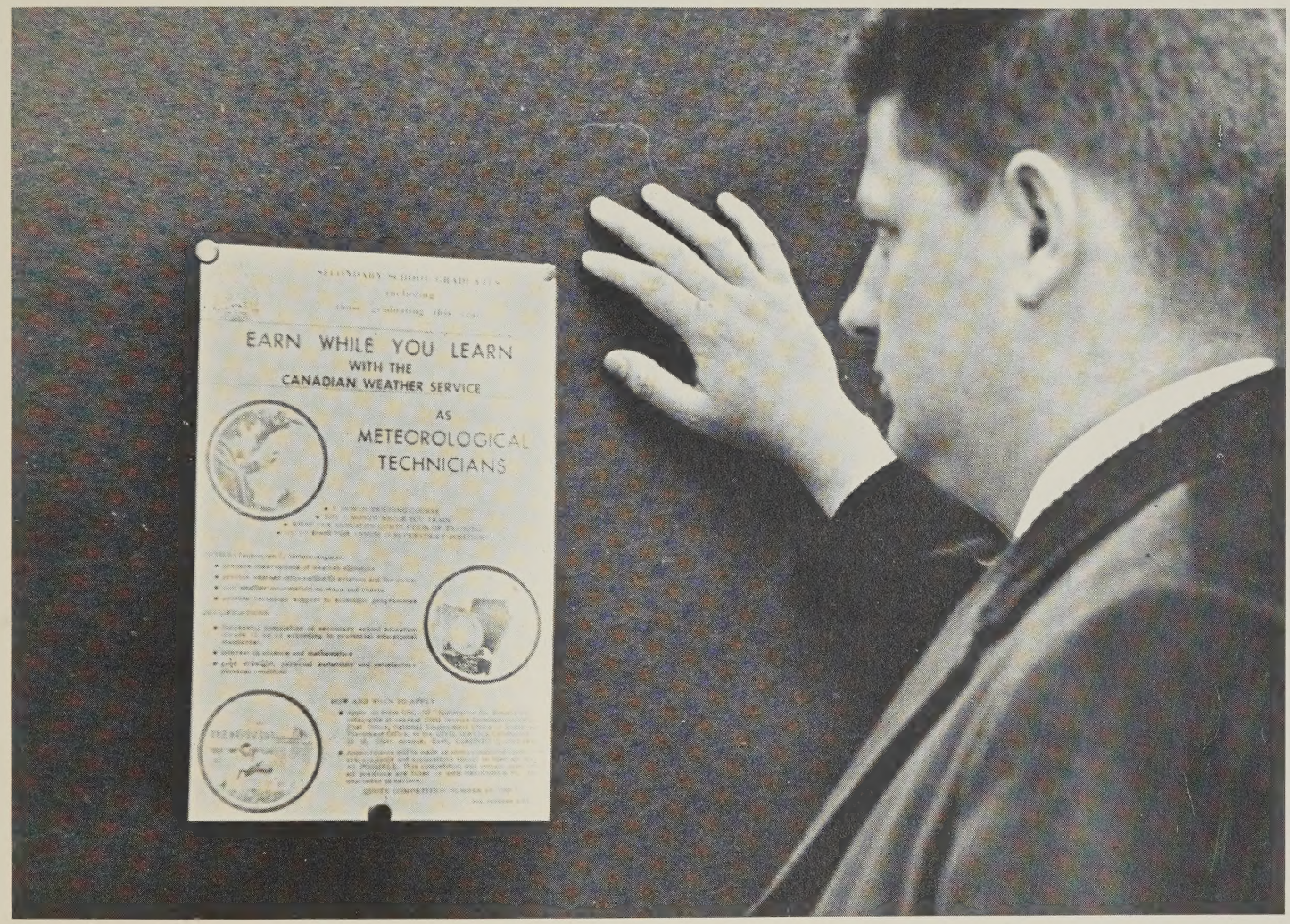
Other courses cover transistor and miniature techniques, marine radio beacon training for lightkeepers, and radio training for Department of Northern Affairs personnel assigned to isolated posts.

Radio Regulations

In the realm of radio regulations the school trains radio inspectors and monitoring operators.

The inspectors study such subjects as the enforcement of international regulations, assignment of frequencies to radio stations, and the detection and remedying of radio interference.

Their studies also include the licensing and inspection of radio broadcasting stations from the big commercial organizations down to the taxi stand operator's communications system.


EARN WHILE YOU LEARN
WITH THE
CANADIAN WEATHER SERVICE
AS
METEOROLOGICAL
TECHNICIANS

The Ottawa international airport terminal building where training by the Air Services School takes place.

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